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ABSTRACT

A survey of instructional, administrative, and policy-level personnel who participated in needs assessment studies in 12 Florida school districts revealed several problems in the use of the discrepancy model in needs assessment. Nine of the district studies focused on instructional needs, such as basic skills or early childhood education; two studies addressed inservice training needs; and one district study constituted a comprehensive needs assessment for long-range planning of instructional, managerial, and inservice programs. Within each of these 12 districts, questionnaires were sent to 24 school board members, 47 district-level administrative staff members, 43 school principals, and 36 teachers who had participated in a needs assessment study in the previous year. The response rate was 70% for board members, 87% for district-level administrators, 72% for principals, and 54% for teachers. The problems uncovered relate to the use of size of discrepancy as a basis for establishing needs priorities and to the setting of priorities without adequate consideration of potential solutions. Alternative criteria for setting needs priorities are presented. Needs assessments based on the importance of goals and size of discrepancy were effective in producing a list of needs ranked by priority; they were less effective in bringing about change. The limited use of needs assessment results was due, in part, to low confidence in the reliability of priorities based on size of discrepancy. Many practitioners preferred change-related criteria and suggested that integrating needs assessment processes with existing planning processes would improve the validity of decisions made about both needs and solutions. One data table is included. (TJH)

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Criteria for Setting Needs Priorities: The Practitioner's Perspective

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ABSTRACT. A survey of instructional, administrative, and policy level personnel who participated in needs assessment studies in twelve Florida school districts revealed several problems in the use of the discrepancy model in needs assessment. These problems relate to the use of size of discrepancy as a basis for establishing needs priorities and to the setting of priorities without adequate consideration of potential solutions. Alternative criteria and procedures for setting needs priorities are presented.

Needs assessment models commonly focus on the ratings of goal importance and on the measured or estimated size of the gap between the desired and observed outcomes, commonly known as a discrepancy model, as the primary criteria for prioritizing needs. Witkin (1979), however, believes that discrepancy models oversimplify the technical and practical realities of the practitioner's situation. She recommends careful consideration of the validity and reliability of the priority setting process under field conditions, and further suggests that criteria such as feasibility of goal attainment, consequences of decisions, and cost-benefit ratios be included in the deliberation. To counter oversimplification in setting priorities, Rookey (1975) proposes that potential success and cost-benefit considerations be given more weight in evaluating discrepancy-based needs , while Kaufman and English (1979) propose that needs priorities be evaluated by comparing the social or opportunity cost of meeting the need with the cost of not meeting the need. Additional criteria for setting needs priorities can be

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found in the models of Sweigert (1969), Eastmond (1971), and Knight (1977).

Although alternative criteria for prioritizing needs have been recommended for more than a decade, recent needs assessment models still recommend starting with goal importance and size of gap as the primary basis for setting priorities (Popham, 1988; Witkin, 1984). Perhaps this continuation stems from the fact that little research has been reported in the utility of these discrepancy model criteria from the practitioner's perspective. The present study was designed to determine the usefulness of various proposed criteria, in addition to those typically employed in discrepancy models, for prioritizing needs.

Using a questionnaire, the opinions of a sample of school personnel who have participated in one or more recent needs assessment studies were sought. The particular information gathered was in the areas of:

1. The major focus of needs assessment studies recently conducted in Florida school districts.
2. The models and criteria actually used to set priority needs in these studies.
3. Practitioners' opinions of the needs assessment process employed including whether the results were used.
4. Practitioners' perceptions of the importance of nine possible criteria, identified from the literature, that could be used for setting needs priorities.

Procedures

Sample Selection

The selection of respondents was done in two stages; first, districts that recently had completed needs assessments were identified, and second, personnel who had participated in these needs assessments were selected. A total of 22 districts in Florida were determined to have carried out formal, systematic needs assessment efforts. Of these 22, only 14 districts had involved enough school personnel in their processes for the purposes of this study.

When contacted, superintendents in 12 of the 14 selected districts agreed to participate in the study and to identify the personnel who had been involved in their needs assessment process. The 12 participating districts included two small districts (enrollment: 2,340 - 3,206), seven medium districts (20,402 - 70,900), and three large districts (110,298 - 240,566), with all five geographical regions of Florida represented by at least one district. Within each of these 12 districts, questionnaires were sent to 24 board members, 47 district level administrators, 43 principals,

and 36 teachers who had participated in a needs assessment study within the previous year.

Sample Description

The response rate was 54 percent for teachers, 70 percent for school board members, 72 percent for school principals, and 87 percent for district level administrative staff. The high return for administrative staff my reflect the fact that they typically have greater responsibility for, and involvement in, the needs assessment process.

Considering all respondents, 58 percent had prior experience in one or more needs assessments, and almost all had some form of preservice or inservice training in the needs assessment process. Respondents were asked about their level of involvement in the needs assessment targeted for this study, and two respondents were eliminated from this study for lack of knowledge about their needs assessment being investigated.

Data Collection

A list of criteria for prioritizing needs was identified in the literature (Knight, 1977; Witkin, 1976; Rookey, 1975; Kaufman, 1972; Eastmond, 1971, Sweigert, 1969) and in models developed by departments of education in several states (Oklahoma, 1973; Ohio, 1974; Alabama, 1973; Colorado, 1973; Rhode Island, 1975). These criteria were listed on the questionnaire with space for practitioners to rank the importance of each criterion on a three point (high, moderate, low) Likert-type scale. Besides the items about criteria for setting priorities, the instrument consisted of questions about the district, the respondent, and use or lack of use of the study results. A second questionnaire was developed to gather information about the design and procedures of the needs assessment carried out as well as whether the results were used. This second form was intended for the individual responsible for overall coordination and completion of the effort. The questionnaires were subjected to two cycles of field testing and revision in both small and medium sized districts.

The questionnaires were mailed with an explanatory cover letter to 150 individuals identified as participants in the needs assessment efforts. Two follow-up letters were sent at three week intervals to help ensure an adequate return.

Results

Study Focus

Nine of the studies focused on instructional needs such as basic skills or early childhood education, two studies addressed inservice training needs, and one study was a comprehensive needs assessment for long range planning of instructional, managerial, and inservice programs. Needs were generally related to student outcome variables, and a few studies also assessed needs related to process variables.

Models and Criteria Used

Information provided by the coordinators of the needs assessment studies indicate that four districts used the system developed by the Florida Department of Education (Knight, 1977). The remaining eight districts did not follow any specific published model.

All districts used ranking of goal importance and size of gap between attained and desired outcomes as criteria for prioritizing needs. Other criteria used, each by only one or two districts, included cost of meeting the need, number of persons directly affected by the need, and the probability of success in alleviating the need.

Overall Opinions

Respondents were also queried about their overall opinions of the needs assessment process and, except for teachers, the data indicated generally favorable opinions. Seventy-five percent or more of the respondents at the policy and administrative levels felt that the process provided necessary information, although about one-half of each of these groups had reservations about the efficiency of the needs assessment process for identifying top priority needs. A clear majority of teachers, however, were not convinced that the process provided necessary information and felt that top priorities could be identified with less effort.

In summary, these needs assessment studies followed generally prescribed procedures such as : (1) defining "need" as a discrepancy between observed and desired states, (2) focusing on student outcome variables, and (3) setting priorities in terms of importance of goal and size of discrepancy.

Other Criteria for Setting Priorities

The preference of the different groups of school personnel for various criteria for prioritizing needs are presented in Table 1. While all but one criterion, "Opinion of experts", were perceived as important by a majority of respondents, consensus reached 70 percent in all groups for only three criteria: (1) ranking of goal importance, (2) probability of success, and (3) feasibility of time, etc. It is interesting that the latter two criteria were seldom included in the models examined in the literature, and indeed, were used in only two of the studies under investigation. Two other criteria, number of persons affected and cost to meet the need, were rated as highly important by over 70 percent of the total group, though not by all subgroups. Surprisingly, the criterion of size of discrepancy or gap, which is central to most needs assessment models, ranked eighth out of the nine criteria presented.

Discussion

These results indicate a discrepancy between the perspective of those who develop needs assessment models and the perspective of school personnel who implement needs assessment studies. Since the concept of need as a "gap" has been central to the conceptual framework of needs assessment, it is not surprising that those who design needs assessment models place emphasis on the size of the "gap" as a major criterion for prioritizing needs. While there are the assumptions that such gaps can be reliably and validly measured and compared, these assumptions may be difficult to defend in the actual conduct of a needs assessment. When respondents were asked to identify the factors that explain instances of little or no use of needs assessment results, the most common response was skepticism about the reliability of the process.

There are three specific steps in determining needs as gaps where error may seriously confound the process. First, setting the standard for "what should be" is often an arbitrary process, and size of gap depends directly on where the standard is set. Second, error enters the measurement of the present state of affairs, and the size of the gap also depends directly on this measurement. Unfortunately, the difference score, or the discrepancy between the desired state and the observed state, tends to be less reliable than the indicator of the desired or the observed state of affairs. This reliability problem is further compounded by the fact that valid comparison of "gaps" for purposes of setting priorities requires equivalent equal-interval scales to measure the gaps. Such equivalence is very difficult to obtain in

Table 1 Percentage of School Personnel who Rated Listed Criteria as "Highly Important" for Prioritizing Needs

Criteria	Board	Staff	Principals	Teachers	Totals
n=	17	41	31	19	108
9.[a] Probability of success if solution implemented.....	94	76	81	84	82
7. Feasibility of time, personnel, etc. for solving need.....	77	83	84	79	82
2. Ranking of goal importance.....	82	78	72	100	80
4. Cost to meet need...	82	83	84	53	77
8. Number of persons directly affected..	71	63	84	86	74
5. Cost to ignore the need.....	82	68	55	53	63
1. Equity of allocation of resources.....	71	66	72	32	62
3. Size of discrepancy between goal and goal attainment....	65	54	58	62	58
6. Opinions of experts.....	36	22	28	16	25

[a]This column of numbers represents the order of presentation in the data collection form, and was not correlated with order of importance in this table.

practice (Lodge, 1981), especially when different procedures are used to measure or estimate the desired and/or present state of affairs.

An awareness of the lack of reliability and comparability of discrepancy scores, based on the practitioner's firsthand experience with the often arbitrary, imprecise, and variable process of setting standards and measuring performance, seems to have been a factor in the practitioner's reluctance to recommend size of gap as a criterion for prioritizing needs. While discrepancy scores may be a legitimate basis for identifying needs, the interpretation of differences between discrepancy scores required by the prioritizing process is a risky business indeed. Steps can be taken to minimize the risk, however, beginning with the selection of a more precise scaling technique such as Equal-Appearing Interval Scaling (Edwards, 1957) or Magnitude Estimation Scaling (Lodge, 1981). The use of matrix techniques (i.e., high priority goal/large discrepancy; high priority goal/ small discrepancy; low priority goal/large discrepancy; low priority goal/small discrepancy) allows one to avoid the interpretation of small and often less reliable discrepancies between standards and performance (Gable, Pecheone, & Gillung, 1981; Hershkowitz, 1973). Moreover, placing additional criteria (e.g., probability of successful need reduction) in a comprehensive decision matrix reduces the degree of reliance on the size of discrepancy in the process of setting priorities (Witkin, 1979).

The preference of the practitioner for pragmatic criteria such as the feasibility of the solution and probability of success is not surprising. The implications of this finding, however, go beyond the desirability of incorporating these criteria in the needs assessment process. The broader implication, as noted in the survey results relating to the use, or lack of use, of needs assessment results, is that needs assessment should not be isolated as a separate process from related problem solving activity. Specifically, the use of feasibility and probability of success as criteria for prioritizing needs suggests two necessary linkages between needs and problem solving. First, in order to make judgments about the feasibility of resolving a need, it is necessary to analyze the need to determine the probable causes and possible solutions to the problem. Needs analysis to identify underlying causes of needs or problems is typically treated as part of the solution design process subsequent to needs assessment. However, Kaufman and Thiagarajan (1987) are among the few who correctly link needs analysis as a step in the process of setting priorities in needs assessment models.

A second linkage to the problem-solving process is required to judge validly the feasibility of successfully resolving a need. Those school personnel who have the responsibility for designing and

implementing the solutions, and who may therefore have a better understanding of what can and cannot be accomplished, should be included in the deliberations on setting need priorities.

Support for this interpretation was found in respondents' perceptions of the uses made of needs assessment information. They reported that their needs assessment studies were isolated from the existing planning processes of their school districts and, therefore, solutions to needs were seldom generated.

In summary, the results of this study indicate that needs assessments based on importance of goals and size of gap were effective in producing a list of needs ranked by priority; they were less effective in bringing about change. Participant feedback indicated that limited use of needs assessment results was due, in part, to low confidence in the reliability of priorities based on size of gap. Although practitioners used size of gap as recommended in the needs assessment literature, this experience led many to prefer change-related criteria such as feasibility and probability of success in resolving the needs priorities. Finally, practitioners suggest that integrating the needs assessment process with the existing planning process will improve the validity of decisions made about both needs and solutions.

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